HW#66: Simplifying Radicals

Geometry

Due: Tuesday, January 12th

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

FAILURE TO WRITE IN COMPELTE SENTENCES OR SHOW ALL WORK WILL RESULT IN LASALLE.

Simplifying Radicals

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| Simplify the following problems. You MUST show all work. | | |
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Application to distance and Pythagorean theorem.

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| Find the missing side of each triangle. Simply your answer fully. | | |
| ../../../../../Desktop/Screen%20Shot%202016-01-09%20at%2012.10.57%20PM | ../../../../../Desktop/Screen%20Shot%202016-01-09%20at%2012.10.47%20PM | 1. Erik found that the hypotenuse of a right triangle is . Can the length be simplified? Explain. |
| Find the distance between each pair of point. | | |
| 1. (4,-1), (-6,1) | 1. (8,-7),(-4,5) | 1. Ariel found that the distance between two points is . Can her answer be simplified? |

Review

Slope and y-intercept

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| 1. Find the y-intercept of a line that has a slope of 4 and goes through the point (-5,10) | 1. A ladder is placed against a wall. The foot of the ladder is 3 feet away from the wall and the top of the ladder touches the wall at a point 15 feet off the ground. What is the slope of the ladder?? |

Writing Equations of lines

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| Directions: Write the slope-intercept form of the equation of the line through the given points. | | |
| 1. Through: (0,3), (-1,-1) | 1. Through: (-4,-5), (2,-3) | 1. Through: (0,2), (0,5) |
| 1. Through: (-2,0) and parallel to y= - (1/3)x+2 | 1. Through (1,-2), and  Parallel to y= -6x | 1. Through: (1,4) and perpendicular to y = - (1/6)x |

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| 1. Write a word problem to describe the situation shown in the figure below. |